

VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0147

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	TEST GROUP	VEHICLE TYPE		AUST EMISSION DARD CATEGORY		INTERMEDIATE IN-USE USEFUL LIFE (miles) ("=N/A or full in-use; A/E=exh. / evap. intermediate in-use)			FUEL TYPE	
		LDT: <6000# GVW,	"LEV II" Ultra Low Emission Vehicle (LEV II ULEV)		EXH / EVAP 120K 150K		EXH	EVAP	Gasoline	
2007	7VVXB03.2U2N	3751 - 5750 LVW					* E			
No.	ECS & S	PECIAL FEATURES		EVAPORATIVE	FAMILY (EV	AF)	. 4	DISPLACE	MENT (L)	
1	1 2TWC(2), 2HAFS, 2HO2S, SFI, OBD(P)			7VVXR0]					
•	•		3.6 2.6	*				3.2		
*			ii i					3. 2		
*	*									

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

BE IT FURTHER RESOLVED:

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

BE IT FURTHER RESOLVED:

That at the request of the manufacturer, LDT models in this test group with a GVW over 6,000 pounds are certified to, and shall be required to comply with, the evaporative emission standards applicable to LDT under 6,000 pounds GVW. That at the request of the manufacturer, LDT models in this test group with a LVW 3751 to 5750 pounds are certified to, and shall be required to comply with, the passenger car SFTP standards.

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this _____ day of July 2006.

Annette Hebert, Chief

Mobile Source Operations Division

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

I NMOG	FLEET	NMOG (@RAF=*			ine; NMOG≃	non-CH4 org	janic gas; Nñ	#HC=non-CH	14 hydrocarbo	n; CO=carboi	n monoxide. I	NOx=oxides o	f nitrogen;
AVERA	GE (a/ml)	CH4 R	RAF = *	NMOG or						edjustment fac				
CERT	STD	NMOG	NMHC	NMHC STD						on-board refu mental federal			ram; mg=milli	gram
0.040	0.040		CERT CERT		CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]	
0.040	0.055	[g/ml]	[g/mi]	[g/mi]	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
	@ 50K	0.028	*	0.040	0.3	1.7	0.03	0.05	•	8.	*	*	0.00	0.07
4.5.754	@ UL	0.043	*	0.055	0.5	2.1	0.03	0.07		11.	*	*	0.01	0.09
73 T (0 50°F & 4K	0.049	•	080.0	0.3	1.7	0.02	0.05	•	16.	*	*	•	*
				A DE ALLO A NIC	No. Landana D.	-1 00	(max 2.7	ALBALLIC LA	O	00 [-/-:1	MINAL	IC+NO»	CO 1	m/mil

CO [g/mi]			NMHC+NOx [g/mi] (composite)		CO [g/mi] (composite)		NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
@ 21	0°F & 50K	Single Control of the	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	1.4	SFTP @ 4000 miles	*	*	*	•	0.04	0.14	0.2	8.0	0.02	0.20	0.1	2.7
STD	10.0	SFTP @ * miles	*	*	4	•	*	•	*	*	*	*	*	*

Evaporative Family	3-Days Diurnal + Hot Soak (grams/test) @ UL		2-Days Diurn (grams/te		Runnin (grams/m		On-Board Refueling Vapor Recovery (grams/gallon) @ UL		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
7VVXR0130ET3	0.34	0.65	0.38	0.85	0.01	0.05	0,01	0.20	
*	•	*	*	*	•	*	*	•	
*	+	•	*	*	*		*	*	
*	•	•	•	*	*	•	*	•	

^{* =} not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air-fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; TC/SC= turbo/super charger; CAC=charge air cooler; O8D (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel

2007 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN- COMP: (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	PHASE-IN STD.	וו מפּס
					EXH	EVAP		
VOLVO	XC90 3.2	7VVXR0130ET3	1	3.2	+	E	SFTP	Partial
VOLVO	XC90 3.2 AWD	7VVXR0130ET3	1	3.2	*	E	SFTP	Partial